<u>**AMENDMENTS TO THE CLAIMS**</u>

The present listing of claims replaces all previous listings of claims of the present application.

<u>**LISTING OF CLAIMS**</u>

1. (currently amended) A method of storing data comprising:

distributing a plurality of nanometer beads filled with nanometer sized particles in a plurality of distinct data pit locations on a rotating data storage medium disk, the nanometer sized particles providing two or more different colors to the nanometer beads, wherein the plurality of distinct data pit locations differ from each other for at least one of said two or more different colors and represent different states, each state being defined by two or more bits corresponding to the presence or absence of any one of said two or more different colors;

exciting said colors within said nanometer beads at each location by making them fluoresce; and

measuring said fluorescence of said nanometer beads at each distinct location to identify presence and absence of each of said two or more different colors;

wherein a <u>calculation of a</u> number of said distinct data pit locations is <u>based on</u> ~~related to~~ a number of said two or more different colors <u>to reduce a space occupied by said data pit locations in the data storage medium disk</u>.

2. (cancelled)

3. (previously presented) The method of claim 1 wherein said nanometer sized particles are nanometer sized fluorescent particles.

4. (previously presented) The method of claim 3 wherein said nanometer sized particles comprise quantum dots.

5. (original) The method of claim 4 wherein said quantum dots are made up of red, blue and green color.

6. (original) The method of claim 4 wherein said quantum dots are made up of a plurality of shades of a color.

7.-9. (cancelled)

10. (previously presented) The method of claim 1 wherein a holographic multi-spectral filter HSMF is used for dispersing collimated fluorescent light on a spectrally sensitive component.

11. (previously presented) The method of storing data of claim 1, wherein

said plurality of nanometer beads are distributed in said plurality of distinct data pit locations using laser-induced technology at each of said plurality of data pit locations.

12.-13. (cancelled)

14. (previously presented) The method of claim 1, wherein the beads placed in the same data pit location are further colored with different shades of a color.

15.-17. (cancelled)

18. (previously presented) The method of storing data of claim 1, said plurality of nanometer beads are distributed in said distinct data pit locations using inkjet technology at each of said plurality of data pit locations.

19. (previously presented) The method of storing data of claim 18, wherein the two or more different colors are red, green and blue and red is the most significant bit followed by blue and green as the least.

20. (currently amended) A method of storing data, comprising

distributing a plurality of nanometer beads filled with nanometer sized particles in a plurality of distinct data pit locations on a rotating data storage medium disk, the nanometer sized particles providing two or more different shades of a color to the nanometer beads, wherein the plurality of distinct data pit locations differ from each other for at least one of said two or more different shades and represent different states, each state being defined by two or more bits corresponding to the presence or absence of any one of said two or more different shades;

exciting the two or more different shades of said color within said nanometer beads at each location by making them fluoresce; and

measuring said fluorescence of said nanometer beads at each distinct location to identify presence and absence of each of said two or more different shades;

wherein a <u>calculation of a</u> number of said distinct data pit locations is <u>based on</u> ~~related to~~ a number of said two or more different shades <u>to reduce a space occupied by said data pit locations in the data storage medium disk</u>.

21. (previously presented) The method of claim 1, wherein the number of said distinct data pit locations is N/M, where N is a number of bits to be stored and M is the number of said different colors.

22. (previously presented) The method of claim 1, wherein the number of said distinct data pit locations is N/L^M, where N is a number of bits to be stored, M is the number of said different colors and L is a number of different shades of each different color.

23. (new) The method of claim 1, wherein the nanometer sized particles of a single pit location are simultaneously illuminated by a single laser source within a focused spot size.

24. (new) The method of claim 1, wherein the different colors of each bead of nanometer sized particles are spectrally separated before reaching a detector.

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